

REMARKS

Any statements or amendments to the claims made herein have been made to respond to the issues and concerns raised in the Office Action, to clarify aspects in the specification and claims, and to refine claim language. Such statements and amendments are believed to be consistent with the disclosure originally filed. The statements and amendments also have been particularly presented to avoid, where applicable, any admission or estoppel, generally, negatively affecting the scope of protection provided by the disclosure and claims of the present application, and also in a manner that avoids prosecution history estoppel, limitation of the scope of equivalences, or the like. Any statement or amendment should not be construed as an admission regarding the propriety of any objection or rejection raised in any Office Action, and the Applicant reserves the right to pursue the full scope of the unamended claims in any subsequent patent application as may be appropriate.

In the current response:

Claims 1-9, 18-42, 44-189 have been, or remain cancelled with claims 10-17, 45-46, 54-69, 73-82, 105-106, 110-113, and 132-136 newly canceled herein therefore no excess claims fees are believed to be required.

Claims 10-12, 15, 43 have been amended.

Claims 190-199 are newly presented.

Claims 10-17, 43, and 190-199 are now pending in the application.

Every amendment is believed to have been made in accordance with Rule 121. However, should any unintended informality exist, it is requested that the undersigned be contacted by telephone so that it may be resolved as expeditiously as possible. It is believed the statements and amendments herein fully respond to the issues raised in the Office Action. Further detail with respect to specific points raised in the Office Action is offered below.

The Office has raised various concerns directed to the current application. While applicant respectfully disagrees with Office's position, in order to simplify the various pending issues and concerns, applicant has amended and/or cancelled various claims - without prejudice, and without creating any estoppel issues - in order to simplify prosecution in an orderly and step-wise manner. In addition, to the extent that the Offices' rejections have been rendered moot by

amendment, those objections will not be taken up directly in this response. As noted below, these amendments have been made as a matter of practicality only. Applicant naturally reserves the right to revisit any of the disclosed subject matter and/or cancelled claims at a later date, for example through a continuation and/or divisional application.

First, the applicant notes the examiners regarding claim clarity. This formatting informality has been corrected in the newly presented claim amendments above. Further, amendments to the specification confirming to examiner's request have been executed and require no further comment.

Second, the Office has raised enablement concerns as to claims 10-17 and 44 under 35 U.S.C 112, first paragraph. As noted above, applicant has amended the claims such that this issue is now moot and respectfully request allowance at the examiner's earliest convenience. Principally, independent claim one has been amended -- without prejudice, to amend the step of selecting a plurality of pH test strips to test for a calcium deficiency, to indicate the step of establishing a separate pH test strip procedure to facilitate a user decision. In one such exemplary embodiment, as supported by the specification and figures - in particular figure 8, such a decision could be to ingest a calcium supplement, or perhaps not to ingest any calcium supplement. Further, such a decision, in some embodiments may include ingesting a certain dose of a calcium supplement based on the results of said pH test strip procedure established to facilitate a user decision. In addition, independent claim 43 has been similarly amended responsive to the Offices' concerns, such that applicant now believes that it is in condition for allowance. Principally, claim 43 has been amended to clarify the use of a calcium supplement in this embodiment, as well as the use of pH test strips to facilitate a user decision.

While the currently amended claims render the following issues moot, to the extend that any concerns remain, applicant points out that there is a relationship between oral pH and calcium levels, such that a user may, using a pH test strip may determine with a level of correlation whether a calcium deficiency exists.

As the Office is well aware, it is a known physiological fact that fluids within the human body (including blood and saliva) generally exists at a slightly alkaline state, generally between

7.1 - 7.5. It is also known that calcium in its ionic form is a cationic compound with two associated positive charges (Ca^{++}). A user, in one example may ingest a certain amount of calcium supplement, such as for example calcium carbonate, resulting in the disassociation of any associate carbonates ($-\text{CO}_3$) resulting in the influx of positively charged and alkaline Ca^{++} ions to be absorbed and diffused throughout the body. In this form, Ca^{++} ions become biologically available to the body and maybe used in a host of physiological process such as muscle contraction, nerve conduction, enzymatic reactions, fluid balance as well as pH equilibrium to name a few. This standard alkaline chemistry, coupled with the principles of diffusion and biological equilibrium, as well as known active cellular transport of Ca^{++} ions throughout the body, clearly indicates that the ingestion of an alkaline substance like Ca^{++} will alter the pH of bodily fluids including blood, urine and saliva. Calcium levels, in particular a deficiency of such will have a detectable effect on oral pH levels. This conclusion is supported by known science on the issues.

First, and most obviously calcium is one of the core elemental components in bones and teeth. Dental enamel for example is composed of nearly 97% calcium. Further, as indicated in the Azar et al. reference Pub. No. US 2001/00112636, saliva contains high levels of concentrated calcium. As clearly indicated in the concurrent submitted Anderson et. al., and Jensdottir et. al., references, Ca^{++} ions may act as a pH-modulating electrolyte and may in fact act to protect dental enamel by modulating critical pH levels reducing tooth demineralization. In addition, Ca^{++} ions are an integral signaling cofactor critical to the biomechanical functioning of α - amylase, the core enzyme in saliva that facilitates the initial breakdown of starch into glucose by breaking the α -1,4-glycosidic bonds among individual glucose units in long-chain starch molecules. Deficiencies in critical co-factors, such as calcium will have a deleterious effect on their associated enzymes and their functions can further affect oral chemistry potentially including pH levels. Should any additional concerns exist, however moot at this time, the examiner is encourage to contact the attorney of record by telephone at her earliest convenience.

It should be understood that the amendments submitted herein are made as a matter of practicality only, and should not to be construed as creating any situation of file wrapper estoppel or the like as all rights are expressly reserved and may be pursued in this or other applications, such as divisionals, continuations, or continuations-in-part if desired. Amendments are made for

tangential issues of clarity and as a matter of the Office's convenience or expedience only. The amendments should not be interpreted as an action that in any way surrenders a particular equivalency, surrenders any right to patent coverage, or otherwise limits any rights that the applicants may now or hereafter assert. It should be understood that, unless and to the extent deemed broadened by this amendment, and even as amended, the applicants expressly reserves all rights, including but not limited to: all rights to maintain the scope of literal coverage with respect to any element as may have existed under the language previously presented, all rights to maintain the scope of equivalency coverage as may have existed under the language previously presented, and all rights to re-present the prior language at any time in this or any subsequent application. To the extent currently foreseeable, no change or reduction in *direct or* equivalency coverage is believed to exist, and no change or reduction in *direct or* equivalency coverage is intended through the presentation of this amendment.

Having addressed each of the Offices' concerns, applicants respectfully request withdrawal of all Office's rejections, and allowance of the above amended claims.

Dated this 26th day of July, 2010.

Respectfully submitted,
SANTANGELO LAW OFFICES, P.C.

By: /David S. Kerr/
David S. Kerr
Attorney for Assignee
USPTO Reg. No. 64447
125 South Howes, Third Floor
Fort Collins, CO 80521
(970) 224-3100